Terr(it)or(ies) of Peace? The Congolese Mining Frontier and the Fight Against "Conflict Minerals"

Christoph Vogel and Timothy Raeymaekers

Department of Geography, University of Zurich, Zürich, Switzerland;
chvogel@geo.uzh.ch, timothy.raeymaekers@geo.uzh.ch

Abstract: This article traces the geography of the "conflict minerals" campaign and its impact on artisanal mining in the eastern Democratic Republic of the Congo, a region that currently emerges as a pioneer case of traceability and due diligence efforts with regard to the exploitation and trade in tantalum, tungsten and tin. We subsequently analyse the opening and attempted closure of the Congolese resource frontier in the context of recent market reform, and we describe how this process has accompanied a transnational corporate–government nexus bent on monopolising Congo's artisanal 3 T resources. Specifically, we argue how the conflict minerals campaign and its implementation "on the ground" has brought about a harmful, disruptive logic for an artisanal mining sector that is notoriously categorised as unruly, illegal, and informal, but of which upstream stakeholders have in practice been jeopardised by transnational reform. We thus shift the attention from questions on the political economy of "resource wars" towards a deeper understanding of the intersecting spaces of production and regulation that underpin formalisation and traceability of "conflict minerals" in this protracted conflict environment.

Résumé: Cet article retrace la géographie de la campagne contre les «minerais de conflit» et son impact sur l'exploitation minière artisanale à l'est de la République Démocratique du Congo (RDC), une région qui émerge actuellement comme un cas pionnier d'efforts de traçabilité et de diligence raisonnable à l'égard de l'exploitation et du commerce de tantale, tungstène et étain (3 T). Nous analysons l'ouverture et la fermeture tentative de cette «frontière de ressources» en RDC dans le contexte de cette intervention récente, et nous décrivons comment ce processus accompagne l'émergence d'un assemblage transnational qui soutient une monopolisation progressive des ressources artisanales 3 T. Précisément, nous analysons la façon dont la campagne contre les «minerais de conflit» et sa mise en œuvre «sur terrain» a provoqué une logique néfaste et disruptive pour un secteur d'exploitation minière artisanale qui est notoirement jugé indiscipliné, illégal et informel, mais dont les parties prenantes en amont de la chaine d'approvisionnement ont été largement mis en péril. Nous déplaçons ainsi l'attention sur l'économie politique des «guerres de ressources» en portant l'analyse vers une compréhension plus profonde des espaces d'intersection entre production et régulation qui proposent la formalisation et traçabilité des minerais comme solution aux problèmes plus larges liés aux conflits armés.

Keywords: territory, frontier, Democratic Republic of the Congo, conflict, governance, natural resources

Introduction

> Market changes spurred by the 2010 Dodd-Frank law on conflict minerals have helped significantly reduce the involvement of armed groups in eastern Democratic Republic of Congo ("Congo") in the mines of three out of the four conflict minerals. (Enough Project 2014:1)

Antipode Vol. 48 No. 4 2016 ISSN 0066-4812, pp. 1102–1121 doi: 10.1111/anti.12236
© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

> iTSCi has protected and improved the lives of tens of thousands of miners working in hundreds of mines that are free of armed groups and human rights abuses. Hundreds of local businesses are meeting international standards of operations to become credible suppliers to international minerals markets. (Pact 2015:vii)

Roughly 15 years ago, the notion of "conflict minerals" found its way to the international arena. These minerals, originating from eastern Democratic Republic of the Congo (DRC), were supposed to finance one of the world's most complex and longstanding protracted wars. Together with the United Nations and advocacy groups, a broad range of international actors has since then begun to address this perceived cause of armed violence, leading in turn to a radical transformation of artisanal mining (ASM) markets as well as local livelihoods in a range of protracted armed conflict environments.

The onset of corporate start-ups like Fairphone and iTSCi—a conglomerate of tin and tantalum producing companies—are nowadays pushing the debate in different directions. Along with a growing pressure of international "naming and shaming" campaigns in countries like Liberia, Sierra Leone, and DRC over the last 15 years, (inter-)governmental bodies have also actively begun pushing for reform initiatives in these countries' mining sectors. Such initiatives are producing important consequences for upstream stakeholders like artisanal miners and intermediary traders in several African markets, we argue in this article. While the conceptual underpinnings of the debate on "blood minerals" have remained rather stable over the last decade—with natural resources still being considered an important "root cause" of civil war, leading in turn to widespread human rights abuse (Cuvelier et al. 2014; Seay 2012)—the practical output has changed dramatically towards consumer-oriented policy interventions that produce several, hitherto unknown consequences "on the ground". It is in this context of changing policy frames and interventions that we situate our argument.

In this article we present the geography of the "conflict minerals" campaign and its impact on the artisanal mining economy in the eastern DRC over the past 15 years. Our argument concentrates on one stream of such current reform initiatives, which crystallises around the so-called 3 T (tin, tungsten and tantalum/coltan), three resources that presumably play a key role in the persistence of protracted armed conflict in Central Africa (Prunier 2009; Stearns 2010; Vlassenroot and Raeymaekers 2004). In contrast to previous contributions, which concentrated mostly on either discourses of international intervention or local impact (Radley and Vogel 2015; Seay 2012) we rather try to understand how eastern DRC's artisanal 3 T sector has transformed as a result of such new regulatory interventions. We show how the subsequent opening and attempted (en)closure of the Congolese 3 T market have triggered a major transformation of a sector that is often deliberately described as unruly and chaotic (Geenen 2012; Reimers 2014) but which, in practice, is bound by competing regulatory regimes. Like similar initiatives before (e.g. the Kimberley Process—see Le Billon 2006) the transfusion of a number of entrenched assumptions about the causes and possible solutions to war economies into actual policy frameworks not only profoundly transforms the configuration of local production networks (Barnett et al. 2005;

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Berndt 2013; Peck and Tickell 2002) but it also affects governance patterns more widely.

Situating our argument in the contemporary debate about resource "frontiers" (Harvey 2006; Li 2014; Peluso and Lund 2011; Pereira 2015; Tsing 2005), we organise this article around the following questions: in what ways has the growing transnational integration and regulation of Congo's 3T sector influenced the shape and type of competition for mineral wealth? How have recent traceability and certification schemes for 3T altered local competition patterns? And how have the dynamics of transnational market and regulatory expansion influenced the prospects for structural "peace" (Galtung 1969)—in the sense of an absence of injustice and violent accumulation—in eastern DRC?

Our argument is rooted in long-term ethnographic fieldwork in the region, stretching over one and a half decades of active engagement.[1] We analyse the gradual restructuring of DRC's ASM economy as a result of intersecting market and regulatory dynamics. We explain how the emerging market "conjuncture" (Massey 1992) of Congolese 3T has radically altered the conditions of economic accumulation, thereby further jeopardising the livelihoods of the very people transnational intervention presumably sought to rescue from warlord abuse. Inspired by emerging geography and anthropology scholarship that offers new ways to think about the b/ordering of political space "in the margins" of formal market systems (Li 2014; Mezzadra and Neilson 2013; Mitchell 2002; Roitman 2004; Tsing 2005) our argument will adopt the following sequence. Departing from certain key misperceptions that have enabled the campaign against "conflict minerals" to gain momentum, we develop our conceptual alternative to address the subsequent impact of market and regulatory transformation in eastern DRC's mines in the first part. In a following part, we show how this new conjuncture materialised and impacted on eastern DRC's political economy during the subsequent opening and (en)closure of DRC's mining frontier between 2000–2009 and 2010–2015. We concentrate our argument on the provinces North and South Kivu, where the bulk of 3T interventions take place. The concluding part lists a few preliminary conclusions, including suggestions for future research.

The Congolese Mining Frontier

Though the idea that wars are not fought to win but to engage in profitable crime (Keen 1998) remains a fundamental premise of the current conflict minerals debate, the past half decade has seen the emergence of a growing community of practice to address the detrimental impact of so-called "blood minerals" on local and global markets.[2] Dozens of (non-)governmental organisations working on so-called "resource wars" increasingly aim at fostering peace in such environments through the formalisation of access rights and the traceability of natural resources "from mine to market"—often in collaboration with commercial partners (Cramer 2002; Goodhand 2005; Verbrugge 2014). While the aim of these organisations is to curb human rights abuse and war financing as a result of the commodification of natural resources by armed actors, a growing body of research has started to fundamentally question the underlying hypotheses stemming from this dominant

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

narrative and its integration into practical policy proposals (Cuvelier et al. 2014; Le Billon 2013). For a starter, systematic data proving the relationship between mineral abundance and armed conflict do not exist (Cramer 2002; Korf 2006; Ross 2004). Second, its statistical correlations are not empirically supported (Nathan 2005): in DRC, for example, only around 10% of over 1500 identifiable conflicts are directly linked to natural resources (MONUSCO 2013). Furthermore, when it comes to offering practical alternatives to "blood minerals", most policy analysis tends to be rather one-sided: while emphasising a doubtful causal relation between mineral exploitation, human rights abuses and gender-based violence, proposals often remain limited to calls for state-building (Autesserre 2012; Seay 2012). Recent empirical data from DRC suggest on the contrary that violent predation intersects with historical economic networks as well as local livelihoods, both of which are explicitly dependent on mining (for DRC, see Geenen 2012; for ASM at large, see Hilson 2011). In sum, depicting artisanal miners and civilians in today's "resource wars" as clueless victims captured between global consumerism and local militia greed may serve campaign purposes quite well; but it gravely glosses over the intricate networks of exploitation, debt, and contested land and access rights that accompany violent accumulation networks in and in the aftermath of war (Cuvelier et al. 2014; Panella 2010).

Inspired by the growing literature on global capitalist frontiers (e.g. Harvey 2006; Pereira 2015; Tsing 2005) we embed our argument in more general concerns for such political-economic intersections. In her work on global connections, for instance, Tsing describes frontiers as particular kinds of edges, or zones of "not yet": not yet legal, not yet formally capitalist, not yet civilised (Tsing 2005:27). Rather than a clear-cut standoff between capitalist and non-capitalist modes, this definition of a frontier describes a twilight zone in which the reorganisation and accumulation of wealth results in an integration and encapsulation, violently moulding into submission the actors that are navigating this unstable terrain (Ribot and Peluso 2003; Sikor and Lund 2009; Taussig 1980, 1984). This focus on liminality enables her to directly associate the work of the law with violent capitalist extraction (Pereira 2015:10). Furthermore, Tsing agrees with others that (il-)legal economies are not fixed in space but rather the result of a process, the outcome of a violent struggle over what are the accepted terms of regulating access and rights to wealth (Abraham and Van Schendel 2005; Mitchell 2002; Roitman 2004). This also draws on previous anthropological work on frontiers as political projects accompanied by a political imaginary of what constitutes legitimate interventions and institutions, and what in contrast should be considered as illegitimate, and chaotic. Hence, frontiers are processes rather than products (Kopytoff 1987; Korf and Raeymaekers 2013; Scott 2009).

So-called "irregular" or "informal" forms of wealth creation are not situated outside capitalism, but they are situated in "liminal" zones, situated in the margins of expanding markets. Frontiers reflect this process of excluded inclusion of the world's marginal zones of production through violent means: they are the "decompression chambers" that equilibrate, in the most violent of ways, the constitutive tensions that underlie the very existence of capitalist markets (Mezzadra and Neilson 2013:149). Most frontiers do not remain open forever, though. They rather

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

accompany "temporal cycles" of dis/articulation,[3] segregation and enclosure (Pereira 2015:9).

The 3T minerals market in the Kivus can exactly be conceived as such a global resource frontier. Here, the gradual articulation of externally legitimised extraction is currently being accompanied by a conscious disarticulation of alternative forms of accumulation that are, consequently, described as "informal" or "illegal". By consequence, the latter are actively being criminalised and the "re-regulation" reifies patterns of inclusion and exclusion. In good neoliberal fashion,[4] the attempt to seal off this perceived *terra nullius* of global resource extraction from its alternatives over the latter part of the 2000s has gone hand in hand with an attempt to remodel state infrastructure at the service of economic markets. Overlooking at once the complexity of prevailing accumulation and trade patterns in the region (Cuvelier et al. 2014; Geenen 2012; Jackson 2002; Smith 2011) as well as the plurality of norms and authorities governing mineral regulation at large (Emel et al. 2011; Nyame and Blocher 2009; Verbrugge 2014; see also, for a general discussion, Hart 2008; Lund 2007), the articulation of formalised ASM in DRC not only fundamentally reshapes existing access and commodification regimes in this sector. Subsequent mapping and legal enclosure of mineral extraction and trade also plays a key role in legitimising a particular kind of peacebuilding strategy in DRC (Spittaels et al. 2014).[5]

Within the wider logic of frontier expansion, therefore, the process of "writing" legislative reforms on a supposed "empty space", or *terra nullius*, is a regulatory intervention that enables reformers to "manage a space that is ... [their] own and distinct from all others and where ... [they] can exercise ... [their] own will" (de Certeau 1984:134)—namely to decide over the right to legally exploit and trade mineral wealth. When applying their ideas of good governance and market reform, therefore, corporations and their critics do not write their reforms onto a blank slate (Kirsch 2014), but they actively try to render comprehensible diffuse patterns of accumulation and exchange—often by drawing distinct territories of accumulation and control (Blomley 2008; Ferguson 2008; Painter 2010:1096). By consciously re-writing the boundaries of this contested legal and regulatory space, the institutions currently engaged in reforming eastern DRC's mining sector try to capture the assets and relations that are already, in some form or another, associated *to* but not *into* the formalised economy. These attempts do not necessarily generate territorial units writ small, but they comprise more widely the broader calculative techniques of marking, bordering, and categorising mobile networks as essentially separate, and separable governable units, as well as the active, material work of "proscribing ... specific activities within (fixed) spatial boundaries" (Vandergeest and Peluso 1995:387–388). It is within this wider logic of the spatialisation of governmental thought (Rose 1999; Watts 2003) that we would like to situate our research.

Our argument can be summarised as follows. First, we argue that, while the observation that mining economies in conflict regions are heavily militarised is not wrong per se, this does not mean that "raping rebels" take miners at gunpoint at any given occasion. The reality is more complex, and civilian–military relationships rather fluid and ambiguous: while in some sites miners negotiate protection

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

with militias, other presumably "conflict free" minerals are subject to taxation by armed actors on the road. Again in other sites, militia and/or army rule literally transposes the state laws (Matthysen and Zaragoza Montejano 2013; Stearns 2014; Verweijen 2013). Furthermore, variations in these relationships are not determined by armed predation exclusively, as diggers, intermediary traders as well as various local authorities "navigate" continuously shifting landscapes of debt, opportunity, and in/security (Geenen 2011; Smith 2011; Vigh 2009). By obscuring these differentiations, mining reformers legitimise their intervention while at the same time altering existing balances of power.

Second, our, arguably more topological approach (Allen 2011; Painter 2010) to global power assemblages facilitates a more sophisticated vision on the ways in which capital and labour flow through this interconnected prism of mineral extraction and exchange networks than some anti-capitalist critics tend to assume. In the frontier constellation of eastern DRC's mineral extraction and trade, capital does not simply "hop" from one place to another (Ferguson 2008), nor is labour necessarily fixed in place (Harvey 2006), but both intersect in a multidimensional space that is actively modelled by protagonists who act as brokers of economic wealth. They include the diggers, mining cooperatives, as well as all sorts of local, national, and foreign actors such as corporations, governments, non-governmental organisations and numerous middlemen who not only co-determine the terms of transnational trade but also play an active role in negotiating the implementation of local development schemes (Hart 2008; Raeymaekers 2014; Roitman 1990).

Under the veil of an international "*mission civilisatrice*", the current reforms not only cast a myopic lens on the intricate relationship between formalisation attempts and economic accumulation. By proscribing formal regulation as a prerequisite for "peace", they also reify a virtual embargo and exacerbate the monopolisation of extraction and exchange by a few, foreign-linked military–commercial networks. Inspired by these considerations, we now turn to the subsequent analysis of the opening and closure of DRC's mining frontier in the context of armed conflict and radical market reform, focusing on 2000–2009 and 2010–2015.

2000–2009, the Opening:Coltan Boom, Congo Bust?

In late 2000, the global market prices for crude tantalum ore suddenly soared from US$25–35 (per pound of tantalum ore) to a roaring US$180–240. At the time, the most common interpretation of this, apparently unexpected, surge quickly became the world's incessant desire for resources: coltan—"the black gold", "the digital mineral"—was needed to sustain the "new economy" production boom of mobile phones and play-stations in growing demand across the globe, it was said (de Failly 2001). Still, the question why demand had exploded in one specific moment in time (December 2000) and one specific place (Central Africa) was left out of the picture. On the basis of more recent evidence, two substantial reasons can help to explain this particular market conjuncture: an increasingly challenged industrial monopoly, and the active foregrounding of Central Africa as a global reserve supplier.

In the beginning, it appeared as if the tantalum boom had taken many by surprise. Given the relatively closed cartel in which consumers operated—involving

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

only few major producers and processors of raw tantalum ore united in a small umbrella organisation called the Tantalum and Niobium International Study Centre (TIC)—speculations had usually been kept to a minimum. In 1999, the Australian Sons of Gwalia (which owned 75% of global reserves) reacted to growing prices by boosting its production. Such investments were largely underwritten by fixed price contracts with two major tantalum customers: Cabot and HC Starck (Cuvelier and Raeymaekers 2002). By doubling its tantalum resource base, the mining giant initially succeeded to appease worries about a steady supply. But an unusually sturdy market boom for tantalum prices at the end of 2000 substantially shook up this comfortable oligopoly. Inspired by what increasingly looked like a steady supply crisis, observers began to see an opening market space in the gap left by faltering industrial production. In a matter of months, companies previously unheard of arose on the firmament of the TIC, literally making millions in the margins of this shattering oligopoly (Hayes and Burge 2003).

Then, a rather unusual thing happened: on 8 December 2000, the US Defense Logistics Agency (DLA)[6] decided to release a stock of 250,000 pounds of tantalum ore to an unknown company, Kamco Metals, a subsidiary of Maitrad Ltd. In the midst of the coltan boom, the DLA sold its stock for an unprecedented US$91 million (or US$364 per pound), which was, even then, generously overpriced. In hindsight, this raised suspicion that (1) the US stock agency was acting upon prior knowledge and (2) it was trying to quench a spreading fire. But it required yet another DLA sale (in April 2001 to HC Starck) and yet another substantial production increase by Sons of Gwalia to finally re-stabilise prices. So why did Kamco decide to buy tantalum at such an excessive price at that period in time? And who had been willing to take the bait and why? Recent documents demonstrate that supply and demand did not meet so "naturally" as some industrialists kept telling the general public: while a carrousel was set up to subvert the historical tantalum oligopoly,[7] DRC increasingly started to occupy a prominent place as a preferred supply site in this expanding market. The immediate consequence of this expansion was a destruction of the dominant colonial businesses. SOGEM, the trade arm of Belgium's reconverted mining outlet Umicore (formerly Union Miniere), lost its markets to competitors from (amongst others) the US and Kazakhstan. And, although large swaths of the populations in eastern DRC remained in idle misery, coltan had increasingly become an aspiration through which some Congolese hoped to improve their situation in the early 2000s (Smith 2011:18).

In the meantime in DRC, this opening market opportunity appeared to generate new chances to a few local political players. While it rained allegations of Rwandan involvement in the appropriation of Congo's minerals (UN 2001),[8] the then RCD (*Rassemblement Congolais pour la Democratie*) rebel government, which occupied large parts of eastern Congo's mineral-rich North-Kivu province, grabbed the opportunity of coltan to become self-reliant. Until then, Rwanda had more or less pulled the strings of this movement. In March 2001, however, the rebels' president Adolphe Onusumba claimed, "we raise more or less $200.000 per month from diamonds. Coltan gives us much more: a million dollars a month" (Nest 2011:93). Four months earlier, he had set up a coltan export monopoly in Goma, called the *Société Miniere des Grands Lacs* (SOMIGL). It levied a US$10,000 duty for each

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

exported ton. SOMIGL exported 112 tonnes of rough tantalum ore in December 2000, 96 tonnes in January 2001 and 27 tonnes in February (Cuvelier and Raeymaekers 2002). A primary destination was Belgium—until SOMIGL collapsed in March 2001, not long after the second DLA sale to HC Starck.[9] A UN Panel of Experts published a list of 37 companies that were allegedly financing the war in DRC (UN 2001). It specifically accused HC Starck of doing business with SOMIGL. While several sources confirm they indeed imported Congolese coltan, the German firm reacted with denial (Cuvelier and Raeymaekers 2002). With "No Blood on my Mobile", a 60-organisation NGO alliance, calling for a temporary embargo, more and more companies felt the urge to stop DRC imports. Nokia and Motorola were among several electronics giants that publicly asked suppliers to stop using ore mined "illegally" in Congo. Cabot officially ceased its imports when the US House of Representatives banned DRC coltan sales in September 2001.

As corporations were pulling out of the DRC, however, Rwanda surprisingly experienced an exceptional growth in coltan exports after March 2001. While coltan presumably ceased to be a prime financial tool for Congo's RCD rebels, statistics showed a strong increase in Rwandan export duties despite the country's insignificant own deposits (Global Witness 2005; UN 2001). In Goma and Bukavu (on the DRC border with Rwanda), only three of 19 coltan *comptoirs* were still operational (Pole Institute 2002). In the meantime, trading posts controlled by the Rwandan army systematically re-exported the ore, with the commercial network around the "Kazakh connection" as main intermediaries (Raeymaekers 2002). Confronted against growing evidence of involvement with the Rwandans' activities, one of their representatives stated, he had "made every effort" to conduct due diligence while buying from the DRC (UN 2009).

The virtual embargo against DRC's coltan from 2001 onwards provoked widespread disaster: instead of saving the Congolese, the Western embargo fostered a far-reaching monopolisation of the tantalum trade in the hands of few violent armed actors who were, indirectly, facilitating the rise of the new Kazakh market contender. Hence, the increasing militarisation of the predominantly informal ASM sector largely deprived the decentralised networks of small-scale producers and local businesses to the benefit of a few powerful actors linked with a closed circle of foreign business interests. Aloys Tegera, a Congolese researcher, complained that:

> For local people who are trying to make a bit of money out of coltan, how can an embargo possibly help? ... [C]ivilians, especially those who are organized, also are getting some money ... Of course, the Rwandans are pillaging us. But they are not the first to do it and they are no worse than the others. King Leopold did it. The Belgians did it. Mobutu and the Americans did it (Harden 2001).

The Congolese federation of entrepreneurs reacted against what they saw as "a large complot ... [to pauperise] the Congolese population" (FEC 2002).

Between 2002 and 2008, the result of the West's embargo was that Congolese continued to exploit coltan, although the focus increasingly returned to other minerals such as tin and gold. Despite international intervention, persistent political instability characterised by increasing local political contestation helped perpetuating military involvement in mineral exploitation and trade. In many areas, "irregular"

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

groups like Mayi-Mayi and the Rwandan FDLR continued to do business with miners. A paradigmatic example was the tin mine of Bisie, in North Kivu's Walikale area: there, rebel groups and renegade army factions controlled mining output in turns, often under the influence of Bosco Ntaganda, a notorious commander who stands trial at the International Criminal Court since 2015 (UN 2009; Zingg Wimmer and Hilgert 2011).

2010–2015, the Closure:(Dis-)articulating the (In-)formal

After the opening of eastern DRC's coltan frontier by a small army of enterprises and their local brokers in the early 2000s, the following years saw a growing consolidation of monopolising business interests through the convergence of newly established international legislation and ensuing practical initiatives aiming at the regulation of mineral flows and the formalisation of access rights. This section will outline some of the consequences of this closing resource frontier. By 2010, international advocacy on "conflict minerals" had turned from a hitherto niche movement into a politically *incontournable* campaign. Several developments contributed to this shift. First, the Organisation for Economic Cooperation and Development (OECD) and the UN Security Council published their respective due diligence guidelines that year. These guidelines further informed the ongoing legislative process in the US, where parts of the "conflict minerals act" was re-introduced as section 1502 of the Wall Street Reform and Consumer Protection Act (hereinafter: "Dodd-Frank 1502"). The section was adopted in July 2010 within one of the broadest pieces of US regulatory legislation. It introduced legal obligations for companies registered with the Securities and Exchange Commission (SEC) to disclose supply-chains for certain minerals to verify whether they originate from DRC. This involves proof of due diligence in the supply chain and descriptions of product components (US Congress 2010).

Curiously, Dodd-Frank 1502 defines as "conflict minerals" "columbite-tantalite (coltan), cassiterite (tin), wolframite (tungsten), gold or their derivatives; or any other mineral or its derivatives determined by the US Secretary of State to be financing conflict in the DRC or an adjoining country" (US Congress 2010: sec.1502, par.e). It strictly defines conflict financing as the control of armed groups over exploitation and taxation between a "conflict mine" and the point of export in the DRC or an adjoining country. Hence, the definition excludes extortion practices by national armies[10]—unlike the aforementioned due diligence guidelines—and disregards violent corruption occurring outside the narrow commodity chain from the mine to exportation (Global Witness 2013). The key motivation for this definition, Congress writes, is that the exploitation and trade of "conflict minerals" by armed groups in DRC helps financing conflict characterised by extreme levels of sexual violence (US Congress 2010)—a fairly unsustainable assertion given the national army FARDC is evenly involved in such (Eriksson Baaz and Verweijen 2013). Earlier on we already indicated the lack of causal links between such militia violence and mining activity in the first place (Autesserre 2012; Seay 2012).

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Not unsurprisingly, the corporate sector fiercely criticised this narrow description of "conflict minerals": while the SEC estimated costs at US$71 million, industry-sponsored estimates go higher, pinning the cost at US$9–16 billion. Moreover, companies questioned the humanitarian purpose of the legislation, (selfishly) claiming that non-compliant companies would step in and buy the minerals at lower costs. However, without Dodd-Frank 1502, SEC-listed companies would continue doing so themselves and in fact, "conflict-free" minerals have not yet causally resulted in higher local prices. Instead of improving the situation, companies claimed, this process might result in further embargo, harm the populace, and provide comparative advantage to smugglers. Subsequently, the US Chamber of Commerce filed a lawsuit against the reporting requirements of Dodd-Frank 1502 (Seay 2012). Meanwhile, a pending draft EU legislation aims at a similar rule with a wider geographic angle.

The most immediate consequence of these international pressures was a mining ban between September 2009 and March 2010 (Geenen 2012). Per decree, President Joseph Kabila put a halt on ASM in North Kivu, South Kivu, and Maniema provinces. While it did not tame "illegal" exploitation, the ban's socio-economic consequences were "a painful illustration of a radical top-down decision that was justified on the basis of the need to formalize artisanal mining, but that proved to be disastrous in its outcomes" (Geenen 2012:326). The affected area is home to about half a million artisanal miners and an estimated 6–8 million dependants (Pact 2010). It had an immediate effect on them but also on others whose livelihoods depend on capital generated through mining, e.g. petty traders, service providers, government agents, and farmers (Seay 2012). Among the consequences were forced migration, militarisation of mines through DRC's regular army (FARDC), and increased recruitment across numerous militias.[11] At last, so it seemed, the "invisible hand" of market-driven reforms started producing its first, real-time victims. In 2011, as a result of the ban, the DRC's ASM sector had largely collapsed and most trading houses closed: in sequence to Dodd-Frank 1502, official trade in North Kivu saw an estimated drop by 80% since 2009, or 65% compared with the ban period in 2010 (Johnson 2013; Seay 2012). While most international businesses left DRC for more secure markets, only some Chinese companies stayed, buying 3T minerals at ridiculously low prices. Even worse, many buyers stopped purchasing to avoid amassing more stock in anticipation of Dodd-Frank 1502's reporting rules, which hung above them like Damocles' sword.

In the meantime, myriad practical initiatives were put in place to implement due diligence guidelines and the emerging transnational law in DRC's disintegrated mineral sector. Their linchpins are the formalisation of professional categories, supply chain traceability, and export certification. The most prominent of these is the International Tin Research Institute's tin supply chain initiative (iTSCi). Key stakeholders include the Congolese government, international industry, and the International Conference on the Great Lakes Region (ICGLR), a regional intergovernmental body with its six-fold Regional Initiative against the illegal exploitation of Natural Resources (RINR), including a Regional Certification Mechanism (RCM). NGOs and bilateral actors add to the topography of actors (Matthysen and Zaragoza Montejano 2013; Pact 2010). Driven by the international tin industry, iTSCi

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

associates key end-user industries (e.g. RIM/Blackberry, Boeing, Qualcomm, Motorola) and full members (local trading houses/*comptoirs* and smelters/refiners such as Malaysian Smelting Corporation, MSC). Alongside corporate members, iTSCi's board also includes NGOs such as Global Witness.

iTSCi employs a strategy of enclosure to integrate one site after another into its scheme. Contrarily to territorial enclosure, however, it favours a strategy of binding trade posts (*comptoirs*) to its scheme with membership, backed by a regime of regulations (including Dodd-Frank 1502, OECD guidelines, ICGLR initiatives and national ratification). Furthermore, it provides upstream companies ("from mine to smelter") with a bagging-and-tagging scheme for 3T minerals, helping SEC-listed companies to report as required by Dodd-Frank 1502. The system is backed by national and provincial legislation in DRC, which made iTSCi the only legal way to source 3T minerals. In practice, the process starts with the government identifying (under influence of other stakeholders) sites to be included in the conflict-free "territory". Subsequently, the provincial mining ministry, its technical branch (*Division*), specialised government agencies (*Service d'Assistance et Encadrement du Small-Scale Artisanal Mining*, SAESSCAM, and *Centre d'Evaluation, Exportation, and Certification*, CEEC), the FEC, local civil society, the International Organisation for Migration (IOM), the UN mission (MONUSCO), Germany's Institute for Geosciences (BGR), and international NGOs run validation missions.

The iTSCi validation process uses a traffic-light categorisation of mines, with green representing "conflict-free", yellow "minor irregularities", and red "major irregularities". However, the composition of the validation team explicitly locates responsibility for illegal mining outside the formalised framework, ignoring illicit practises by governmental (including army) actors—which reflects earlier misconceptions by the US government (see above). In addition, the process comes with vicious spatial effects: based on the dominant narrative that ASM is necessarily linked to conflict financing, all mines are considered guilty until proven innocent. This effectively places the whole sector under a general suspicion, with the effect that each mine is de facto criminalised, and disarticulated from licit trade networks.

Once the iTSCi validation has been "qualified" by ministerial decree, iTSCi and its implementing partners Pact, a US NGO, and SAESSCAM can start "bagging-and-tagging" minerals from identified areas. The b/ordering between "conflict" and "conflict-free" areas is thereby strengthened by an enclosure of the formerly unregulated, supposedly militarised, areas. While subject to economic reasoning (only larger sites have been included so far) the validation process dis/articulates mining areas through a flat two-dimensional mapping of mining sites as being either "occupied" or "unoccupied" by armed actors.[12] Structurally, this process both perpetuates and reifies DRC's ASM sector as an imagined "uncivilised" area that needs to be captured by a legitimising trade regime, in this case, a closed supply chain. In a progressing frontier logic, iTSCi thereby incorporates lucrative mines—backed by the national ratification of foreign laws and guidelines and powerful corporate members.

Though iTSCi can be credited for rolling out a complex system in a challenging environment, statistics paints a mediocre picture: only around 50 out of 900 sites in South Kivu alone are connected to legal markets after four years. Even worse:

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

in some iTSCi sites the presence of armed actors persists, prices stagnate, and fraud surges. Dozens of testimonies confirm it has become usual practice to either introduce "illegal material" to get tagged in iTSCi sites or bring iTSCi tags to non-iTSCi places. Wherever iTSCi is attractive, e.g. due to a lack of extralegal options, economic actors often succeed to infuse their production at permeable spots of the closed pipeline.[13] Wherever iTSCi is not the most attractive option, e.g. as prices collapsed in "clean mines", miners and middlemen began to leak parts of the production into blank spaces on the formal map. In 2014, the UN Group of Experts "concludes that, in the absence of a third-party audit, the secretariat of the ... [ICGLR] cannot confirm whether certified mining sites in ... [DRC and Rwanda] meet all the requirements" (UN 2015a:par.79). In 2015 it reports continuing sales of Rwandan tags (UN 2015b:par.59).[14] So while iTSCi succeeds in monopolising the market, it fails to induce a clean minerals trade.

The system's shortcomings also include a conflictive interplay of traceability and previously existing access regulation, creating new oligopolies and amplifying tensions between overlapping and competing governable spaces (Johnson 2013; Ribot and Peluso 2003). Paradoxically, this renders the "conflict-free" supply chain "unfree" and formalisation fails to kick-start sustainable development.[15] The market conditions imposed by this emergent monopsony even worsened when migration dynamics began reacting to the changed conditions: many miners actively started moving around to reach the few existing "conflict-free mines" but also to return to gold and gemstones, untouched by reforms (Spittaels et al. 2014). Others again gradually morphed into the shadow economy of 3 T and other commodities, where violent militarisation sometimes rose like a phoenix from the ashes. Three market-induced dynamics exacerbated the perils of frontier enclosure by iTSCi:

- First, iTSCi, which remains the only legal way of sourcing 3 T minerals from eastern DRC by 2015, created a transnational monopsony through the bottleneck position of smelters, effectively de-linking local pricing from world market prices. This increases transaction costs for upstream stakeholders: while transnational businesses manage to buy at artificially lowered prices (iTSCi charges its operational cost on members), miners, cooperatives, and middlemen bear the brunt. With the imposition of prices, the economic turnover of artisanal miners eventually declines. In addition, without complementary livelihood projects that make up for the loss of informal solidarity and pre-financing arrangements (that used to provide a basis for economic activity in the "informal" scheme), formalisation inevitably reduces livelihood options, in other words: "*il n'est pas possible de vouloir une chose et son contraire*" (de Failly 2011).
- Second, iTSCi propelled local monopsony, for instance in the mines around Rubaya in North Kivu. In early 2014, 17 sites were validated "green" but only the seven held by the Societé Miniere de Bisunzu (SMB)—a member of iTSCi—were introduced into its traceability scheme. The remaining 10 are part of the parastatal SAKIMA concession, while in all but one of the 17, miners of the COOPERAMMA cooperative work. In theory, they must sell the production originating from SMB to the latter and stock the production originating

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

from SAKIMA. However, it is hard to verify where a specific bag comes from, given geographic proximity and geological similarity. While iTSCi triggered a price increase in the first three months, this was nullified by SMB's inability to buy off the complete production of its concession, resulting in payment delays. This monopsony was reinforced by transnational pressure on SMB and the lack of legal alternatives to sell Rubaya's coltan. With each payment delay, DRC's authorities record increased contraband and violent breakthrough at control points. The fraud dynamics correlate with the fluctuation in Rubaya's coltan production statistics and link criminal DRC- and Rwanda-based businessmen to FARDC elements and international buyers (UN 2015a).

- Third, iTSCi contributed to the exacerbation of contested access and property dynamics due to its assumption of a *terra nullius* and consequent clash with competing governable orders. Ignored by iTSCi, an underlying customary succession conflict has placed competing local authorities against each other in one validated mine. Notwithstanding ongoing conflicts over concessions and land rights, a concerned company was admitted as iTSCi member. Together with the concession holder, they formed a trading consortium and eventually entered into collaboration with one faction of the divided customary power that was at the same time maintaining a militia. They were able to establish a de facto monopsony and dismantle the hitherto complementary informal production networks. Meanwhile, the consortium interferes in the local conflict dynamics by paying salaries to members of the militia, including the interim head of the local mining office. So far, iTSCi has largely ignored this constellation.

While economic operators outside iTSCi are largely excluded from the supply chains, these three dynamics are among several backdoor re-entries to the market, in collusion with state (FARDC or mining agents) or non-state actors (customary authorities or militias). In line with observations before traceability—the case of the non-integrated 85th FARDC brigade in Walikale, North Kivu (Garrett et al. 2009:14)—iTSCi implicitly, perhaps inadvertently, "legitimizes illegal, or outright criminal networks" as long as they do not disturb the "peace" that enables transnational companies' access to Congo's minerals.

A final side effect of iTSCi's disarticulation of large swaths of artisanal 3 T mining activity through its closed pipelines is the renewed boom in gold, charcoal, and other commodities that serve violent accumulation by both militia groups and the army in eastern DRC. This confirms that not minerals, but rather the commodification of any resource (increasingly including peoples' labour)—as a means but not an end itself—constitutes a key node of the violent crisis in eastern DRC (van Damme 2012).

It remains hard to assess whether there is a reduction in money flows from such militarised commodity markets to armed actors since Dodd-Frank 1502 and iTSCi. Recent estimates from "conflict minerals" campaigners lack evidence as to their methodologies and claims made (Enough Project 2014; Radley and Vogel 2015). The conflict topography appears to be more influenced by political (e.g. 2011's elections triggering the emergence of the M23) and military (e.g. M23's defeat

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

triggering the demobilisation of other militias) developments. With 70 different armed groups in the Kivu provinces in 2015, the bottom line is that the fight against "conflict minerals" has not yet lowered the number and intensity of armed conflicts in DRC (Stearns and Vogel 2015). It even heightens the risk of armed mobilisation: "Monopoly and price collapse is also a security issue. Over 30% of our miners are former militiamen. It is like filling a glass with water, at some point it will boil over", an influential stakeholder said. This permanent ambiguity leads us to some conclusions.

Terr(it)or(ies) of Peace: The Conflict Minerals Agenda and Local Development

In this article, we have argued that the implementation of "conflict minerals" regulations in eastern DRC has largely exacerbated dynamics of economic monopolisation rather than helping to improve the livelihoods of upstream stakeholders as was discursively intended. Our topological understanding of the Congolese mining economy as a mobile resource frontier instead traces the intersections of changing rule patterns within such violent capitalist expansion in the margins of formalized global mineral markets. We found that iTSCi promotes a fixation of economic relationships in a bounded political space that is territorial, not in a strict topographical sense but rather as an effect of b/ordering socio-technical practices—to the detriment of local subsistence markets. Our analysis generates five main conclusions.

First, policy continues to wrongfully depict the ASM sector as being generally unregulated, criminalised, and militarised (Cuvelier et al. 2014; Geenen and Radley 2014; Nest 2011). For example, in a recent study on the impact of Dodd-Frank 1502 and traceability, Enough Project (2014:2) claims that conflict actors "are no longer present at two-thirds" of eastern DRC's mines. Wrongly so, as it insinuates such actors have eventually been controlling all the mines. Moreover, it presents the "conflict minerals" campaign and its legal and practical corollaries as a plain success story and underestimates the spatio-temporal fluidity of violent accumulation strategies.

Second, we argued, uncritically equating resource exploitation with criminality in contexts of armed conflict not only ignores the motivations and risk dispersal strategies of hundreds of thousands artisanal miners. It actually risks generating exactly the opposite effects of peaceful development, namely more violence (Geenen 2012; Radley and Vogel 2015). Rather than assuming a positive relation between access right formalisation and "peace", this equation lacks in-depth understanding of how participants in the mining economy react to formalisation and how these reactions influence the regulation of the sector as a whole. African producers—and DRC is no exception—do not typically operate separately in particular "sectors" but they try to disperse economic risk by balancing alternatives, in short they *navigate* between different livelihood options (Panella 2010; Roitman 1990; Vigh 2009).

Third, a Cartesian understanding of economic space—the way "conflict-free" sourcing is rolled out into the frontier—completely neglects the exchanges between

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

different production networks, miners, and commercial intermediaries. It mistakenly assumes a linear commodity chain "from mine to market" influenced by static conflict dynamics, i.e. once a mine is "clean" or "green", it will remain so. Within a constantly moving frontier zone, this triggers increasing friction between iTSCi and other "governable spaces" of mineral extraction.

Fourth, "fixing" things by traceability and formalisation not only risks downgrading the problem of mineral governance to a technical level. It also largely overshadows the impact of transnational regulation schemes on mineral production and miners' livelihoods in a conflict environment of overlapping norms and laws accelerated by the introduction of deliberately neoliberal reform agendas.[16] The dialectical twist of establishing un-free supply chains to create a conflict-free market in the name of peace and development speaks intimately to this logic. Rather than peace, in the sense of an absence of structural violence, this reform deepens the terror of displacement and dispossession and endangers livelihoods and economic survival, as our complementary data from five key mining areas suggest.

Fifth, rather than focusing exclusively on "illegality" and "informality", more attention must be paid to the way mineral producers are actively weighing costs and benefits of formal*isation*. This requires analysing the push and pull factors, such as institutional choice patterns, political patronage, and the wider pluralist and volatile institutional environment in which formal*isation* and frontier enclosure takes place at local and regional scales. In conjunction with the need to focus research on actual root causes of the Congolese conflicts, such as land issues, violent corruption, and elite struggles, such a focus on mobile production and exchange networks can hopefully help to free the Congolese mining sector from its mythical "heart of darkness".

Acknowledgements

We would like to thank the three anonymous reviewers as well as Antipode's editorial team for their comments and support. In addition, we express our gratitude to Josaphat Musamba, Anna Piccinni, and the Political Geography Unit at the University of Zurich, as well as to all our interlocutors in the DRC. The Swiss National Science Fund (SNF/FNS) supported our research and fieldwork through a generous grant.

Endnotes

[1] Between 2000 and 2015, the authors did fieldwork in North and South Kivu, carrying out several hundreds of qualitative interviews and focus groups with all stakeholders actively and passively implicated.

[2] While the notion of greed and the depiction of rebels as an "extreme form of organized crime" (Collier 2000:2–3) are rather simplistic, complex geographic connections between conflicts in the global periphery and "the technological heartland of metropolitan society" (Duffield 2001) indeed involve cross-border transnational markets, illicit taxation in local economies and a deepening interplay between organised state and non-state violence (Reno 1998; Roitman 2004; Verweijen 2013).

[3] We define articulation as "various mechanisms by which agents and processes are integrated into place-bound systems of production ... [T]he way in which the articulation of particular places into a new commodity chain is often contingent on a prior moment of *dis*articulation—that is, on the disorganization or reconfiguration of previous production relations and social formations" (Hough 2011:1017).

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

[4] In Wacquant's (2012) definition, neoliberalism entails not the abolition but rather the re-engineering of the state as institutional machinery and underlying membership ideology phased on market dominance. Neoliberalism re-regulates, not deregulates, the economy in favour of corporations by engaging in extensive "corrective" measures in order to create a "free market" order that is actually monopsonistic rather than verged on global free trade (Peck 2013). To do so, neoliberalism regulates movement and liberty of populations who are most destabilised by deepening inequality and work insecurity. Finally, it endorses a "penal" state that enforces punitive paternalism and "ghetto-isation" upon those at the bottom (Wacquant 2012).

[5] Concretely it links up with wider spatial interpretations of liberal peace, illustrated by the UN's "islands of stability" approach that has characterised peacebuilding in DRC since 1999 (Raeymaekers 2013; Vogel 2014).

[6] DLA is an agency in the US Department of Defense. Besides providing logistic supplies (including weaponry) to the military, it also is engaged in the acquisition and trade of "strategic resources" (http://www.dla.mil/Pages/default.aspx).

[7] Documents (http://pbadupws.nrc.gov/) and company correspondence (industry sources) confirm that the destination of the DLA stock was the Ulba Metallurgiucal Plant in Kazakhstan, administrated via Carlton Property Development Ltd, registered in the British Virgin Islands. While Maitrad/Kamco sold the tantalum at a ridiculously low price (US$55–57/pound) to Ulba, CPD figures as an important customer of its tantalum exports along a group of companies—Pacific Ores and Nottington Trading, which UN experts later identified with businessmen Chris Huber and John Crawley, Kazakhstan's business pioneers in Central Africa (UN 2009:175–178). At the very least, one could argue Kamco had been acting as a front for Kazakh business interests. At the most, the DLA had been trying to push for a market restructuring.

[8] UN investigations suggested that Rwandan prisoners were extracting coltan in the mines of North Kivu, from where helicopters and planes would fly out the minerals to Kigali (UN 2001).

[9] SOMIGL was located at Shenimed, directed by Aziza Kulsum (alias Madame Gulamali), a cigarettes and arms smuggler.

[10] While this point has often been made, with regard to DRC (Raeymaekers 2002) and generally (Marchal and Messiant 2002), it would go beyond the scope of this article to explain its deeper (geopolitical) motivations (Ballentine and Sherman 2003).

[11] During the mining ban, the Congolese army got increasingly involved in mineral exploitation again (Garrett et al. 2009). Our fieldwork documents armed mobilisation among miners who had been driven into illegality by traceability or by monopsony-induced price collapses, including the militias Raia Mutomboki and Nyatura.

[12] In June 2014, a total of 39 sites were validated in the two Kivu provinces, 25 of them green, half of them produced under the iTSCi scheme. Almost 80 sites in Katanga and Maniema operated iTSCi by mid-2014 (ITRI 2014).

[13] Technically, minerals receive tags in their zone of exploitation before being channelled to Goma or Bukavu. In our fieldwork, we found numerous instances where tags had been sold or assigned to minerals in other places.

[14] Our fieldwork suggests that both phenomena are pervasive in South Kivu by 2015, and that provincial authorities as well as iTSCi must be informed about these problems, given they figured on the agenda of non-public joint meetings.

[15] Our observations in one out of our five fieldwork sites confirm a linear decrease of both miners' numbers and economic turnover in the local mineral and non-mineral markets (food and non-food items, as a proxy for economic well-being in mining centres) in 2014 and 2015.

[16] See endnote 4.

References

Abraham I and van Schendel W (2005) *Illicit Flows and Criminal Things: States, Borders, and the Other Side of Globalization*. Bloomington: Indiana University Press

Allen J (2011) Topological twists: Power's shifting geographies. *Dialogues in Human Geography* 1(3):283–298

Autesserre S (2012) Dangerous tales: Dominant narratives on the Congo and their unintended consequences. *African Affairs* 111(443):1–21

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Ballentine K and Sherman J (2003) *The Political Economy of Armed Conflict: Beyond Greed and Grievance*. Boulder: Lynne Rienner
Barnett C, Cloke P, Clarke N and Malpass A (2005) Consuming ethics: Articulating subjects and spaces of ethical consumption. *Antipode* 37(1):23–45
Berndt C (2013) Assembling market b/orders: Violence, dispossession, and economic development in Ciudad Juárez, Mexico. *Environment and Planning A* 45(11):2646–2662
Blomley N (2008) Law, property, and the geography of violence: The frontier, the survey, and the grid. *Annals of the Association of American Geographers* 93(1):121–141
Collier P (2000) *Economic Causes of Civil Conflict and their Implications for Policy*. Washington, DC: World Bank
Cramer C (2002) Homo economicus goes to war: Methodological individualism, rational choice and the political economy of war. *World Development* 30(11):1845–1864
Cuvelier J and Raeymaekers T (2002) "European Companies and the Coltan Trade: An Update." International Peace Information Service, Belgium, September
Cuvelier J, van Bockstael S, Vlassenroot K and Iguma C (2014) "Analyzing the Impact of the Dodd-Frank Act on Congolese Livelihoods." Social Science Research Council Conflict Prevention and Peace Forum, New York, November
Cuvelier J, Vlassenroot K and Olin N (2014) Resources, conflict and governance: A critical review. *The Extractive Industries and Society* 1(2):340–350
De Certeau M (1984) *The Practice of Everyday Life*. Berkeley: University of California Press
De Failly D (2001) Coltan, pour comprendre. In S Marysse and F Reyntjens (eds) *L'Afrique des Grands Lacs: Annuaire 2000/2001* (pp 279–306). Paris: L'Harmattan
De Failly D (2011) "Note on the need to let some time to implement a thorough control system on artisanal mining in Eastern DRC." Bureau d'etudes scientifiques et techniques, République Démocratique du Congo, March
Duffield M (2001) *Global Governance and the New Wars: The Merging of Development and Security*. London: Zed
Emel J, Huber M and Makene M (2011): Extracting sovereignty: Capital, territory, and gold mining in Tanzania. *Political Geography* 30(2):70–79
Enough Project (2014) "The Impact of Dodd-Frank and Conflict Minerals Reforms on Eastern Congo's Conflict." Enough Project, Washington, DC, June
Eriksson Baaz M and Verweijen J (2013) The volatility of a half-cooked bouillabaisse: Rebel-military integration and conflict dynamics in eastern DRC. *African Affairs* 112 (449):563–582
Fédération des Entreprises du Congo-Bukavu (FEC) (2002) "Memorandum des opérateurs économiques du secteur minier au Sud-Kivu/R.D. Congo en rapport avec les enquêtes sur les activités commerciales à l'est de la R.D. Congo." Unpublished manuscript
Ferguson J (2008) Seeing like an oil company: Space, security, and global capital in neoliberal Africa. *American Anthropologist* 107(3):377–382
Galtung J (1969) Violence, peace, and peace research. *Journal of Peace Research* 6(3):167–191
Garrett N, Sergiou S and Vlassenroot K (2009) Negotiated peace for extortion: The case of Walikale territory in eastern DR Congo. *Journal of Eastern African Studies* 3(1):1–21
Geenen S (2011) Relations and regulations in local gold trade networks in South Kivu, Democratic Republic of Congo. *Journal of Eastern African Studies* 5(3):427–446
Geenen S (2012) A dangerous bet: The challenges of formalizing artisanal mining in the Democratic Republic of Congo. *Resources Policy* 37:322–330
Geenen S and Radley B (2014) In the face of reform: What future for ASM in the eastern DRC? *Futures* 62:58–66
Global Witness (2005) "Under-Mining Peace: Tin–The Explosive Trade in Cassiterite in Eastern DRC." Global Witness, Washington, DC, June
Global Witness (2013) "Putting Principles into Practice: Risks and Opportunities for Conflict-Free Sourcing in Eastern Congo." Global Witness, Washington, DC, May
Goodhand J (2005) Frontiers and wars: The opium economy in Afganistan. *Journal of Agrarian Change* 5(2):191–216
Harden B (2001) A black mud from Africa helps power the new economy. *The New York Times* 12 August. http://www.nytimes.com/2001/08/12/magazine/12COLTAN.html (last accessed 2 February 2016)

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Hart K (2008) "Between Bureaucracy and the People: A Political History of Informality." Danish Institute for International Studies Working Paper No. 2008/27, Copenhagen
Harvey D (2006) *Spaces of Global Capitalism*. London: Verso
Hayes K and Burge R (2003) "Coltan Mining in the Democratic Republic of Congo: How Tantalum-Using Industries Can Commit to the Reconstruction of the DRC." Fauna and Flora International Conservation Report, Cambridge.
Hilson G (2011) Artisanal mining, smallholder farming, and livelihood diversification in rural sub-Saharan Africa. *Journal of International Development* 23(8):1031–1041
Hough P (2011) Disarticulations and commodity chains: Cattle, coca, and capital accumulation along Colombia's agricultural frontier. *Environment and Planning A* 43(5):1016–1034
ITRI (2014) "iTSCi Democratic Republic of Congo (DRC) Data Summary: Q2 2011 to Q4 2013." ITRI, London, June
Jackson S (2002) Making a killing: Criminality and coping in the Kivu war economy. *Review of African Political Economy* 29(93/94):517–536
Johnson D (2013) "No Kivu, No Conflict? The Misguided Struggle Against 'Conflict Minerals' in the DRC." Pole Institute, Democratic Republic of Congo:, April
Keen D (1998) Economic functions of violence in civil wars. *Adelphi Papers* 38(320):1–88
Kirsch S (2014) *Mining Capitalism: The Relationship Between Corporations and Their Critics*. Oakland: University of California Press
Kopytoff I (1987) *The African Frontier: The Reproduction of Traditional African Societies*. Bloomington: Indiana University Press
Korf B (2006) Cargo cult science, armchair empiricism, and the idea of violent conflict. *Third World Quarterly* 27(3):459–476
Korf B and Raeymaekers T (2013) *Violence on the Margins: States, Conflict, and Borderlands*. New York: Palgrave MacMillan
Le Billon P (2006) Fatal transactions: Conflict diamonds and the (anti)terrorist consumer. *Antipode* 38(4):778–801
Le Billon P (2013) *Wars of Plunder: Conflicts, Profits, and Resources*. Oxford: Oxford University Press
Li T M (2014) *Land's End: Capitalist Relations on an Indigenous Frontier*. Durham: Duke University Press
Lund C (2007) *Twilight Institutions: Public Authority and Local Politics in Africa*. Chichester: Wiley-Blackwell
Marchal R and Messiant C (2002) De l'avidité des rebelles. L'analyse économique de la guerre civile selon Paul Collier. *Critique Internationale* 16:58–69
Massey D (1992) Politics and time/space. *New Left Review* 196:65–84
Matthysen K and Zaragoza Montejano A (2013) "'Conflict Minerals' Initiatives in DR Congo: Perceptions of Local Mining Communities." International Peace Information Service, Antwerp, November
Mezzadra S and Neilson B (2013) *Border as Method, or, the Multiplication of Labor*. Durham: Duke University Press
Mitchell T (2002) *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: University of California Press
MONUSCO (2013) "Civil Affairs Section Conflict Database." United Nations Organization Stabilization Mission in the Democratic Republic of the Congo
Nathan L (2005) "The frightful inadequacy of most of the statistics": A critique of Collier and Hoeffler on causes of civil war. *Track Two* 12(5):5–36
Nest M (2011) *Coltan*. Cambridge: Polity
Nyame F and Blocher J (2009) Influence of land tenure practices on artisanal mining activity in Ghana. *Resources Policy* 35: 47–53
Pact (2010) "PROMINES Study: Artisanal Mining in the Democratic Republic of Congo." Pact, Washington, DC, June
Pact (2015) "Unconflicted: Making Conflict-Free Mining a Reality in the DRC, Rwanda, and Burundi." Pact, Washington, DC, July
Painter J (2010) Rethinking territory. *Antipode* 42(5):1090–1118
Panella C (2010) *Worlds of Debt: Interdisciplinary Perspectives on Gold Mining in West Africa*. Amsterdam: Rozenberg
Peck J (2013) Explaining (with) neoliberalism. *Territory, Politics, Governance* 1(2):132–157

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Peck J and Tickell A (2002) Neoliberalizing space. *Antipode* 34(3):380–404
Peluso N and Lund C (2011) New frontiers of land control. *Journal of Peasant Studies* 38(4):667–681
Pereira G (2015) The underground frontier. *Continent* 4(4):4–11
Pole Institute (2002) "The Coltan Phenomenon: How a Rare Mineral has Changed the Life of the Population of War-torn North Kivu Province in the East of the Democratic Republic of Congo." Pole Institute, Democratic Republic of Congo, January
Prunier G (2009) *Africa's World War: Congo, the Rwandan Genocide, and the Making of a Continental Catastrophe*. Oxford: Oxford University Press
Radley B and Vogel C (2015) Fighting windmills in eastern Congo? The ambiguous impact of the "conflict minerals" movement. *Extractive Industries and Society* 2(3):406–410
Raeymaekers T (2002) "Network War. An Introduction to Congo's Privatised War Economy." International Peace Information Service, Antwerp, October
Raeymaekers T (2013) Post-war conflict and the market for protection: The challenges to Congo's hybrid peace. *International Peacekeeping* 20(5):600–617
Raeymaekers T (2014) *Violent Capitalism and Hybrid Identity in the Eastern Congo: Power to the Margins*. Cambridge: Cambridge University Press
Reimers L (2014) "Natural Resource Exploitation in the Democratic Republic of Congo: A Genealogy of the Narrative of Illegality." Unpublished MA thesis, Graduate Institute of International and Development Studies, Geneva.
Reno W (1998) *Warlord Politics and African States*. Boulder: Lynne Rienner
Ribot J and Peluso N (2003) A theory of access. *Rural Sociology* 68(2):153–181
Roitman J (1990) The politics of informal markets in sub-Saharan Africa. *Journal of Modern African Studies* 28(4):671–696
Roitman J (2004) *Fiscal Disobedience: An Anthropology of Economic Regulation in Central Africa*. Princeton: Princeton University Press
Rose N (1999) *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press
Ross M (2004) How do natural resources influence civil war? Evidence from 13 cases. *International Organization* 58(1):35–67
Scott J C (2009) *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press
Seay L (2012) "What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy." Center for Global Development Working Paper No. 284, Washington, DC, January
Sikor T and Lund C (2009) *The Politics of Possession: Property, Authority, and Access to Natural Resources*. Chichester: Wiley-Blackwell
Smith J (2011) Tantalus in the digital age: Coltan ore, temporal dispossession, and "movement" in the Eastern Congo. *American Ethnologist* 38(1):17–35
Spittaels S, Matthysen K, Weyns Y, Hilgert F and Bulzomi A (2014) "Analysis of the Interactive Map of Artisanal Mining Areas in Eastern DR Congo: May 2014 Update." International Peace Information Service, Antwerp, May
Stearns J (2010) *Dancing in the Glory of Monsters: The Collapse of the Congo and the Great African War*. New York: Public Affairs
Stearns J (2014) Causality and conflict: Tracing the origins of armed groups in the eastern Congo. *Peacebuilding* 2(2):157–171
Stearns J and Vogel C (2015) "The Landscape of Armed Groups in the Eastern Congo." Congo Research Group, New York, December
Taussig M (1980) *The Devil and Commodity Fetishism in South America*. Chapel Hill: University of North Carolina Press
Taussig M (1984) Culture of terror, space of death: Roger Casement's Putumayo report and the explanation of torture. *Comparative Studies in Society and History* 26(3):467–497
Tsing A L (2005) *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press
UN (2001) "Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of Congo." United Nations Security Council Report S/2001/357, New York, April

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

UN (2009) "Final Report of the Group of Experts on the Democratic Republic of the Congo." United Nations Security Council Report S/2009/603, New York, November
UN (2015a) "Final Report of the Group of Experts on the Democratic Republic of the Congo." United Nations Security Council Report S/2015/19, New York, January
UN (2015b) "Midterm Report of the Group of Experts on the Democratic Republic of the Congo." United Nations Security Council Report S/2015/797, New York, October
US Congress (2010) "Dodd-Frank Wall Street Reform and Consumer Protection Act." 111th Congress of the United States of America, Second Session, Washington, DC
Van Damme S (2012) "Commodities of War: Communities Speak Out About the True Cost of War in Eastern DRC." Oxfam Briefing Paper 164, London, November
Vandergeest P and Peluso N (1995) Territorialization and state power in Thailand. *Theory and Society* 24(3):385–426
Verbrugge B (2014) Capital interests: A historical analysis of the transformation of small-scale gold mining in Compostela Valley province, Southern Philippines. *Extractive Industries and Society* 1(1):86–95
Verweijen J (2013) Military business and the business of the military in the Kivus. *Review of African Political Economy* 40(135):67–82
Vigh H (2009) Motion squared. A second look at the concept of social navigation. *Anthropological Theory* 9(4):419–438
Vlassenroot K and Raeymaekers T (2004) *Conflict and Social Transformation in Eastern DR Congo*. Gent: Academia
Vogel C (2014) "Islands of Stability or Swamps of Insecurity? MONUSCO's Intervention Brigade and the Danger of Emerging Security Voids in Eastern Congo." Egmont Institute Africa Policy Brief 9, Brussels, February
Wacquant L (2012) Three steps to a historical anthropology of actually existing neoliberalism. *Social Anthropology* 20(1):66–79
Watts M (2003) Development and governmentality. *Singapore Journal of Tropical Geography* 24(1):6–34
Zingg Wimmer S and Hilgert F (2011) "Bisie: A One-Year Snapshot of the DRC's Principal Cassiterite Mine." International Peace Information Service, Antwerp, November

© 2016 The Author. *Antipode* © 2016 Antipode Foundation Ltd.

14678330, 2016, 4, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/anti.12236 by University Of Toronto Mississauga, Wiley Online Library on [07/03/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License